The approach of a scientist to examine a research question involves the development of a specific research proposal. Clinical faculty members often comment that they are unfamiliar with the scientific method and consequently are not engaged in research projects. Yet, Clinical Care follows a systematic series of steps that are in fact quite closely related to the features of a research protocol. A patient’s Chief Complaint presents a situation that naturally leads to a question, “Why did this happen?” This is equivalent to the generation of a research question that scientists investigate in their own research. Clinical and research questions lead to new knowledge, either through in depth analysis or scientific investigation that are often directly relevant to applications resulting in improved patient care. If the thinking of a skilled clinician and a basic scientist follow very similar pathways, how can new scientific knowledge advance patient care? Understanding of disease mechanisms is advancing rapidly and it is becoming clear that all patients have both genetic and environmental risk factors and that there exists a gene–environment relationship in the causation of human disease. The basic research that has generated these findings represents an important foundation on which clinicians can build to continually improve their approaches to patient treatment. However, it is critical that skilled clinicians are able to obtain and evaluate new scientific advances and appropriately integrate them into their practices. This necessitates in dental students an awareness of the role of research in the profession and the development of skills to find and assess information. Rather than simply learning what is known at the time of their dental education, students must be prepared to continually shape their patient care on the best available evidence that has been produced by rigorous scientific studies. In their 40 year careers in oral health care dentists will see many advances in scientific understanding. Are our graduates prepared to use them to the best benefit of their patients?

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